

property of transforming sugar into lactic acid, (Johnson). Here then is the remedy for the disease, converting the sugar, the chief evil, into lactic acid, closely allied to hydrochloric the natural acid of the stomach. The sulphite of soda, I may mention here, possesses the faculty of preventing the formation of glucose, one of the important steps in the transformation of starch into sugar. In this disease the whole process is chemical, the nature and abnormal change is chemical, the prevention and cure alike act by chemical laws. Starch is given for food. Sugar is found in the excrements. In the cure, sugar is converted into the most important and useful agent in the animal economy. In each and every process chemical tests unquestionably confirm, "or at least so prove it, that the probation bears no hinge nor loop, to hang a doubt on."

In vol. II. *Montreal Medical Journal*, 1861, page 150, I published the following remarks on the chemical treatment of disease, referring to Liebig and Muller's opinions, that inflammation is an oxydized state of the protean compounds of the blood, and that all diseases was the result of derangement of the affinities of particles, necessitating chemistry as an important adjunct to a regular course of medicine. We do know of strange chemical changes constantly attending the animal economy. Thus in the normal state, the gastric juice, almost the first stage in nutrition, is acidulous, while the blood, the result of this digestion, is alkaline. Again we have the secretion from the liver, the largest secreting organ in the body, with an alkaline base, while the product of the no less important organ, the kidney, is uric acid. We have also the oleaginous and albuminous secretions, the representations of nitrogen and carbon, as we find others of oxygen and hydrogen,—the two other elementary principles of all organic compounds. This is the healthy state. How innumerable the effects of their slightest variation in disease?—not acknowledging the theory that this constitutes disease, but simply viewing them as co-incidents and their regulation as concomitants.

Take, for instance, the simplest form of congestion, or perhaps more properly, torpor of the liver, found in the moderate drinker, particularly of the beer drinker, and when, in supposed moderation, he has taken a little extra, with a few glasses of spirits.—You find the tongue coated with heavy white fur, the